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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/588,072	06/05/2000	Ahmed Saifuddin	QCPA000320	8110
23696	7590	06/09/2005	EXAMINER	
Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			TORRES, JOSEPH D	
			ART UNIT	PAPER NUMBER
			2133	

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/588,072

Applicant(s)

SAIFUDDIN ET AL.

Examiner

Joseph D. Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 May 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-15 and 35 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 9-15 and 35 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 28 January 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 05/20/2005 have been fully considered but they are not persuasive.

The Applicant contends, "Applicants' claim 9, and thereby all respective dependent claims, have the features "the outer quality metric being used for protection of the plurality of information bits and the inner quality metric being used for protection of the at least one group of information bits of the particular class" and "wherein the outer quality metric: and the inner quality metric are determined independently." As explained in Applicants' specification as originally filed the outer quality metric and the inner quality metric operate independently, so that if at the receiver the outer quality metric shows an erasure on the entire frame, the inner quality metric can be used to check the integrity of a group of information bits of a particular class. Please see page 6 line 33 through page 7, line 4".

The Examiner disagrees and asserts that that the device of Figure 10 in Jarvinen teaches receiving a plurality of information bits (the class 1A bits + 15 next most important bits from class 1B are a plurality of information bits), the plurality of information bits containing different classes of information bits (the class 1A bits + 15 next most important bits from class 1B forming the plurality of information bits contain class 1A and 1B bits); and determining an outer quality metric in accordance with the

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plurality of information bits (CRC generator 908 determines an outer CRC quality metric in accordance with the class 1A bits + 15 next most important bits from class 1B forming the plurality of information bits) and an inner quality metric in accordance with at least one group of information bits of a particular class (CRC generator 206 determines an inner CRC quality metric in accordance with at least one group of information bits of a particular class since CRC generator 206 determines the inner CRC quality metric in accordance with the 50 class 1A bits), wherein the outer quality metric and the inner quality metric are determined independently (Note: 8-bit CRC generator 908 and 3-bit CRC generator 206 apply CRC only to information bits; hence do not require information from each other to operate, in fact; the 3-bit CRC generated by CRC generator 206 can be calculated in parallel or prior to the 8-bit CRC from CRC generator 908 since the 3-bit CRC generator 206 only requires the 50 class 1A bits and absolutely no information from the 8-bit CRC Generator 908).

The Examiner would like to point out that page 6 line 33 through page 7, line 4 discuss decoding steps 220-228, which are all performed at the decoder and have nothing to do with the encoding process of claims 9 and 35. The Examiner does not see how page 6 line 33 through page 7, line 4 provide any support for any of the limitations in claims 9 and 35.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "As explained in Applicants' specification as originally filed the outer quality metric and the inner quality metric operate independently, so that if at the receiver the outer quality

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metric shows an erasure on the entire frame, the inner quality metric can be used to check the integrity of a group of information bits of a particular class") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The Applicant contends, "Jarvinen, on the other hand, states in column 13, line 62 to column 14, line 2 that the "the 50 Class I A bits are encoded by 8 bit encoder 908 and the 50 encoded Class IA bits and the 15 Most important Class 1B bits are encoded by 3 bit encoder 206." That is, the encoded Class IA bits, including the quality metric bits, are encoded again. This is also shown in Fib 10, where the entire bit stream from the first encoder, including the quality metric bits, is fed into the second encoder. Therefore, Jarvinen does not teach the feature "wherein the outer quality metric and the inner quality metric are determined independently" because the second quality metric is a function of the first quality metric".

The Examiner disagrees and asserts that Applicant has searched the Jarvinen patent to find an erroneous statement the statement in column 13, line 62 to column 14, line 2 in Jarvinen is obviously erroneous and not supported anywhere else in the Jarvinen patent. What Jarvinen explicitly teaches in Figures 9-10 and col. 13, lines 45-46 in Jarvinen is that 3-bit CRC Generator 206 only encodes the 50 class 1A bits whereas Figures 9-10 and col. 13, lines 55-58 in Jarvinen teaches that the 8-bit CRC generator 908 generates CRC for the class 1A bits + 15 next most important bits from class 1B.

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The Applicant can consider the statement in column 13, line 62 to column 14, line 2 an alternative embodiment, but clearly what Jarvinen intended to say was --the 50 Class I A bits are encoded by 3-bit encoder 206 and the 50 Class 1A bits and the 15 Most important Class 1B bits are encoded by 8 bit encoder 908-- since that is the statement supported by Figures 9 and 10 in Jarvinen and supported by the text in col. 13, lines 45-46 and col. 13, lines 55-58 (both Figures 9 and 10 clearly label 8-bit CRC generator 908 as receiving 50 Class 1A bits and the 15 Most important Class 1B bits for encoding whereas Figures 9 and 10 clearly label 3-bit CRC generator 206 as only receiving 50 class 1A bits). Finally, the Examiner would like to point out that regardless of what is intended in column 13, line 62 to column 14, line 2 in Jarvinen, Figures 9 and 10 and the text in col. 13, lines 45-46 and col. 13, lines 55-58 still teach --the 50 Class I A bits are encoded by 3-bit encoder 206 and the 50 Class 1A bits and the 15 Most important Class 1B bits are encoded by 8 bit encoder 908--.

The Examiner asserts that 8-bit CRC generator 908 and 3-bit CRC generator 206, as taught in Figure 9 and 10 and the text in col. 13, lines 45-46 and col. 13, lines 55-58 in Jarvinen, apply CRC only to information bits; hence do not require information from each other to operate. In fact; the 3-bit CRC generated by CRC generator 206 can be calculated in parallel or prior to the 8-bit CRC from CRC generator 908 since the 3-bit CRC generator 206 only requires the 50 class 1A bits and absolutely no information from the 8-bit CRC Generator 908.

As per claim 35:

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The Examiner would like to point out that that MPEP § 714.04 states, "In the consideration of claims in an amended case where no attempt is made to point out the patentable novelty, the claims should not be allowed. See 37 CFR 1.111 and MPEP § 714.02. An amendment failing to point out the patentable novelty which the applicant believes the claims present in view of the state of the art disclosed by the references cited or the objections made may be held to be not fully responsive and a time period set to furnish a proper reply if the statutory period has expired or almost expired (MPEP § 714.03). However, if the claims as amended are clearly open to rejection on grounds of record, **a final rejection should generally be made**".

The Examiner asserts that claim 35 is a substantial duplicate of claim 9 and the Examiner maintains the rejection of claim 35 for the same reasons that the Examiner maintains the rejections of claim 9. In addition, the previous rejection of claim 9 applies just as well to claim 35.

The Examiner disagrees with the applicant and maintains all rejections of claims 9-15 and 35. All amendments and arguments by the applicant have been considered. It is the Examiner's conclusion that claims 9-15 and 35 are not patentably distinct or non-obvious over the prior art of record in view of the references, Jarvinen; Kari et al. (US 6170073 B1, hereafter referred to as Jarvinen) in view of Tanaka; Mitsugu (US 5740187 A) as applied in the last office action, filed 08/24/2004. Therefore, the rejection is maintained.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 9-14 and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Jarvinen; Kari et al. (US 6170073 B1, hereafter referred to as Jarvinen).

35 U.S.C. 102(e) rejection of claims 9-14.

See the Final Action filed 08/24/2004 for detailed action of prior rejections.

35 U.S.C. 102(e) rejection of claim 35.

See the rejection to claim 9 in the Final Action filed 08/24/2004 for detailed action of prior rejections.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating

obviousness or nonobviousness.

3. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jarvinen; Kari et al. (US 6170073 B1, hereafter referred to as Jarvinen) in view of Tanaka; Mitsugu (US 5740187 A).

See the Final Action filed 08/24/2004 for detailed action of prior rejections.

### ***Conclusion***

4. This is a RCE of applicant's earlier Application No. 09/588,072. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**JOSEPH D. TORRES  
PRIMARY EXAMINER**

Joseph D. Torres, PhD  
Primary Examiner  
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